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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,728	12/30/2003	Karl Guthrie	P 6040.13007	9047

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EXAMINER
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SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/749,728

Applicant(s)

GUTHRIE ET AL.

Examiner

Jeffrey Sharp

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 32-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

This action is responsive to Applicant's remarks/amendment filed on 28 March 2005 with regard to the Official Office action mailed on 29 December 2004.

#### ***Status of Claims***

[1] Claims 32-61 are pending.

Claims 1-31 are cancelled.

#### ***Claim Objections***

[2] Claim 23 was previously objected to because of informalities. Applicant has cancelled this claim in the amendment filed on 28 March 2005. Accordingly, the objection to claim 23 been withdrawn.

#### ***Double Patenting***

[3] Applicant is advised that should claim 54 be found allowable, claim 48 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Response to Arguments/Remarks***

[4] Applicant's comments have been acknowledged. The amendment to the claims filed on 28 March 2005 has been fully and carefully considered in view of the prior art. It is to be noted that previously cited Phillips US-4,572,464 reference states:

"While the body portion is flexible, it is not so flexible that it will not provide sufficient stability to assist in removal of the chock once the chock is no longer required as a protection point<sup>1</sup>..."

As discussed in the telephonic interview on 10 March 2005, Applicant takes the position that a flexible cleaning bushing cannot transmit a striking force. Examiner finds this debatable, because most objects have the inherent ability to transmit a force, even though they may have slightly flexible properties.

Regardless, all previous rejections of claims 1-31 are moot as being directed to cancelled claims, and therefore have been withdrawn in view of the following new grounds of rejection.

Applicant is reminded of the Examiner's duty to interpret the claims in their broadest reasonable sense.

***New Grounds of Rejection***

***Claim Rejections - 35 USC § 102***

[5] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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<sup>1</sup> Col 5 lines 7-11.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[6] Claims 32-42, 48, 54, and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by George et al. US-5,484,132.

In short, George et al. teach a cable (33), a collar (15) slideably attached to the cable, a first chock (23) connected to a first end of said cable, a second chock (25a) connected to the collar (via intermediate part cleaning bushing 13), and a cleaning bushing (13) slideably attached to the cable. A tool could be used to transfer a striking force to said cleaning bushing (through the collar) to dislodge (i.e., 'loosen') the first and second chocks. Tools (e.g., punches) for removing pitons, cams, nuts, anchors, and the like from rock are known in the art<sup>2</sup>.

As for claim 33, the second chock (25a) is shaped complimentary to said first chock (23) and has a semi-cylindrical outer surface.

As for claims 34 and 35, the second end of the cable (33) terminates in a handle (31).

As for claim 36-39, George et al. show third chock (25b). Both are "connected to" the collar (15) via respective flexible rods (35,37). This connection is facilitated by intermediate part cleaning bushing (13). The second and third chocks (25a,25b) are symmetrically disposed about the first chock (23).

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<sup>2</sup> See NPL Mountain Equipment Co-op, NPL Maintaining the Big Stones, and NPL "The Black Art of Piton Craft".

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As for claims 40-42, first and second chocks (25a,25b) have substantially annular gripping portions. An outer surface of each comprises a frustoconical portion.

As for claims 48 and 54, the first chock (23) narrows where it connects to the cable (33). This is best seen in Figure 2.

As for claim 61, it is obvious to use tools to aide in removing rock anchors as discussed above. A simple strike to the collar (15) would produce a force transmitted to the cleaning bushing (13), which would in turn, transmit the same force to the first chock (23), thereby loosening the grip of the chocks. An indirect strike would provide the same effect as a direct strike to the cleaning bushing if the cleaning bushing (13) and collar (15) were separated from each other.

Note there is no specific definition for the limitation "independent of", and therefore the definition may be construed broadly such as "each having its own boundary" or "a separate entity". It appears Applicant may have meant --slideably-- independent of one another.

[7] Claims 32, 48, 54, and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by Best Jr. US-4,715,568.

In short, Best Jr. teaches a cable (61), a collar (63) slideably attached to the cable (via sleeve 62), a first chock (58) connected to a first end of said cable, a second chock (51) connected to the collar (via flexible rod 54), and a cleaning bushing (64) slideably attached to the cable. In the event the cleaning bushing does not manually budge due to high wedge forces, a tool could be used to transfer a striking force to said cleaning bushing to dislodge (i.e., 'loosen')

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the first and second chocks. Tools (e.g., punches) for removing pitons, cams, nuts, anchors, and the like from rock are known in the art<sup>3</sup>.

As for claims 48 and 54, the first chock (58) narrows where it connects to the cable (61). This is best seen in Figure 11.

As for claim 61, a striking tool such as nut tools known in the art could be used in a pulling fashion (hook part) to strike the cleaning bushing (64) so as to loosen the wedge grip of the chocks.

### *Claim Rejections - 35 USC § 103*

[8] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[9] Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Best Jr. US-4,715,568 in view of Byrne US-4,834,327.

Best Jr. substantially teaches each and every limitation of the instant claim 32 as discussed above; however, Best Jr. fails to expressly disclose a third chock having slip resistant gripping patterns.

Byrne suggests a third chock for more even wedging within a crack. This also cuts the forces on each chock, because there are more to displace the same load.

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<sup>3</sup> See NPL Mountain Equipment Co-op, NPL Maintaining the Big Stones, and NPL "The Black Art of Piton Craft".

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the expansion bolt taught by Best Jr., by employing a third chock as suggested by Byrne, in order to improve the wedging effect by adding more chocks.

As for claim 36, movement in a first direction (towards chocks) provides an expanding effect.

As for claims 37-39, the inner and outer shapes of the first and second chocks (41) are configured to conform to the fit the surrounding first chock (42) and surrounding crevice (46). The chocks are arranged symmetrically.

As for claim 40, the chocks may include slip-resistant gripping patterns (Figs 7 and 9)

[10] Claims 32-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lerich US-3,352,193 in view of Dohmeier US-3,478,641 and the old and well known.

In short, Lerich teaches a rigid cable (12), a collar (30) slideably attached to the cable, a first chock (16) connected to a first end of said cable, a second chock (18) and third chock (18) azimuthally symmetrical about said first chock and being connected to the collar by respective flexible rods (24), and a cleaning bushing (32) slideably attached to the cable. A tool could be used to transfer a striking force to said cleaning bushing in a first direction to dislodge (i.e., 'loosen') the first and second chocks. Tools (e.g., punches) for removing pitons, cams, nuts, anchors, and the like from rock are known in the art<sup>4</sup>.

However, Lerich fails to disclose expressly, the cable to be of a flexible metallic braid (not claimed).

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<sup>4</sup> See NPL Mountain Equipment Co-op, NPL Maintaining the Big Stones, and NPL "The Black Art of Piton Craft".



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Dohmeier suggests that it is within an obvious scope, to make a flexible cable (2 shown in Figure 1) a rigid cable (20 shown in Figure 3), and vice-versa as an art-recognized equivalent. This is evidenced by the alternative embodiments.

Further, the old and well-known method of using a hammer or the like to dislodge a cam, nut, piton, and the like from a rock face (also known as "cleaning") suggests "unwedging" stuck chocks that may be in too deep or too far engaged for manual removal. This method is normally used as a last resort so as to remove unsightly anchors from natural landscapes, but can be effective if performed correctly<sup>5</sup>.

At the time of invention, it would have been obvious to one having an ordinary skill in the anchoring art, to replace the stiff cable of Lerich with a more flexible cable as suggested by Dohmeier, in order to achieve the advantages associated with flexibility such as maneuvering the device into cracks or achieving a greater range of motion on the rock face to follow a climber's line.

Further, it would be obvious to strike, pull, or wedge any portion of the expansion bolt taught by either Lerich or Dohmeier, with a tool as means for removal of the expansion bolt, in the event that the manual release means provided thereto fails to successfully dislodge the chocks from an expanded position.

As for claim 33, the second chock (23) taught by Dohmeier is shaped complimentary to the first chock (19) and has a semi-cylindrical outer surface.

As for claims 34 and 35, the second end of the cable (1) taught by Dohmeier terminates in a handle (2).

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As for claim 36 and 37, Dohmeier shows third chock (23). The second and third chocks are symmetrically disposed about the first chock (19). The third chock has inner and outer surfaces that are shaped to the inner and outer surfaces of said second chock.

As for claims 40 and 41, Dohmeier shows first (19) and second chocks (23) having substantially annular gripping portions (5,6).

As for claims 42 and 43, Lerich suggests a frustoconical first chock (16 Figure 3), said first chock being narrower towards the end where it is joined to the cable (12).

As for claims 39, 44, 45, and 47, both Lerich and Dohmeier suggest three chocks all having respective complimentary inner and outer surfaces. The second and third chocks are azimuthally symmetrically disposed about the first chock.

As for claims 38 and 46, Lerich shows the second and third chocks (18) connected to the collar (30) via flexible rods (24).

As for claims 48 and 54, the first chock taught by both Lerich and Dohmeier (16 and 19, respectively) narrows where it connects to the cable (12 and 1, respectively).

As for claim 49, Lerich shows the first chock (16) to be frustoconical in shape.

As for claims 50-53 and 55-58, Lerich shows a third chock (18) azimuthally symmetrical with said first and second chocks, and connected to said collar (30) via flexible rods (24). The inner and outer surfaces of said third chock (18) are appropriately configured to be complimentary to and substantially identical to said second chock.

As for claims 59-60, Dohmeier suggests that the chocks may have slip-resistant gripping patterns such as spaced-apart, annular portions (5,6).

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<sup>5</sup> See NPL Mountain Equipment Co-op, NPL Maintaining the Big Stones, and NPL "The Black Art of Piton Craft".

As for claim 61, it is obvious to use tools to aide in removing rock anchors as discussed above. A simple strike to the collar (15) would produce a force transmitted to the cleaning bushing (13), which would in turn, transmit the same force to the first chock (23), thereby loosening the grip of the chocks. An indirect strike would provide the same effect as a direct strike to the cleaning bushing if the cleaning bushing (13) and collar (15) were separated from each other.

Note there is no specific definition for the limitation "independent of", and therefore the definition may be construed broadly such as "each having its own boundary" or "a separate entity". It appears Applicant may have meant --slideably-- independent of one another. In either case, the collar (30) and cleaning bushing (32) taught by Lerich are "independent of" each other.

### *Conclusion*

[11] The examiner suggests placing --rigid-- before "cleaning bushing" as well as --and slideably-- before "independent of said collar" in claim 1, so as to provide structure to the functional recitation "for...transmitting a striking force". There is currently no specific definition for "independent of", and therefore the definition may be construed broadly<sup>6</sup>. These additions are not meant to put the claim into condition for allowance, but rather clarify the meaning of "independent" and to depart from Phillips US-4,572,464, which states:

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<sup>6</sup> For instance, George et al. US-5,484,132 shows a cleaning bushing (13) "independent of" collar (15), because they are two "independent" pieces that happen to be joined together.

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"While the body portion is flexible, it is not so flexible that it will not provide sufficient stability to assist in removal of the chock once the chock is no longer required as a protection point<sup>7</sup>...It has been found that it is generally possible to remove the chock by compressing the spring and exerting a slight forward (towards the wedges) force which assists in adjusting the wedges...[such that the chock] may be withdrawn from the crevice<sup>8</sup>"

[12] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[13] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

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<sup>7</sup> Col 5 lines 7-11.

<sup>8</sup> Col 5 lines 15-18.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



Handwritten signature and date 6/1/05.



Handwritten signature and printed name: ROBERT J. SANDY  
PRIMARY EXAMINER